97-84032-28

Outerbridge, Eugenius Harvey

Preliminary report of a comprehensive plan for...

[New York]

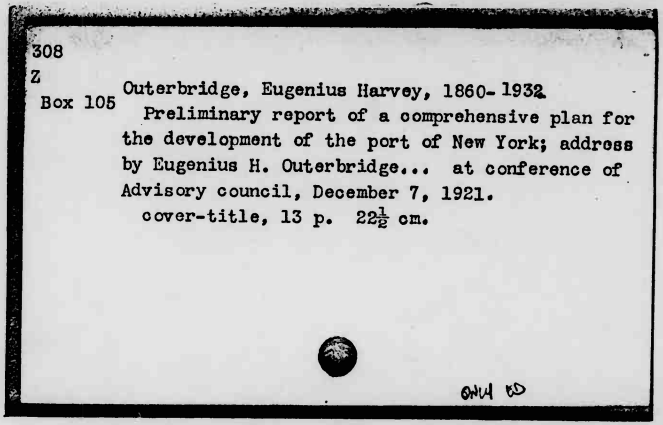
[1921]

97-84032-28
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD


308
Z
Box 105
Outerbridge, Eugenius Harvey, 1860-1932.
Preliminary report of a comprehensive plan for the development of the port of New York; address by Eugenius H. Outerbridge... at conference of Advisory council, December 7, 1921.
cover-title, 13 p. 22½ cm.

RESTRICTIONS ON USE: *Reproductions may not be made without permission from Columbia University Libraries.*

TECHNICAL MICROFORM DATA

FILM SIZE: 35 mm **REDUCTION RATIO:** 10:1 **IMAGE PLACEMENT:** IA (IIA) IB IIB

DATE FILMED: 2-28-97 **INITIALS:** MS

TRACKING # : MSH 22303

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

BIBLIOGRAPHIC IRREGULARITIES

MAIN ENTRY: Outerbridge, Eugenius Harvey

Preliminary report of a comprehensive plan for the development of the Port of New York

Bibliographic Irregularities in the Original Document:

List all volumes and pages affected; include name of institution if filming borrowed text.

_____Page(s) missing/not available:_____

_____Volume(s) missing/not available:_____

_____Illegible and/or damaged page(s):_____

_____

_____Page(s) or volume(s) misnumbered:_____

_____Bound out of sequence:_____

_____Page(s) or volume(s) filmed from copy borrowed from:_____

_____

X foldout between pages 10 and 11

_____Other:_____

_____

_____Inserted material:_____

TRACKING#: MSH22303

308
Z
Box 105

PRELIMINARY REPORT

OF A

COMPREHENSIVE PLAN

FOR THE

Development of the Port *of* New York

Address by Eugenius H. Outerbridge
Chairman, Port of New York Authority
At Conference of Advisory Council, December 7, 1921

Box 4
The Port of New York Authority
12-23-21

C/S Dec 1923

TO THE MEMBERS OF THE ADVISORY COUNCIL:

You have been called here to-day as the conferees and advisors of the organizations and interests which you represent and of the Port Authority, to have presented to you, as the first of the groups to receive it, the conclusions which the Port Authority has reached in reference to the comprehensive plan for the future development of the whole port, as the result of the seven months intensive work that has been done by the Port Authority in conference with a great many interests in reviewing the work of the previous Bi-State Commission and in accordance with the directions of the law constituting the Port of New York Authority.

The magnitude of the port problem cannot possibly be grasped in a short time even by those who are more or less actively concerned in some elements of it, and these conferences developed the presentation of new projects, diverse angles of thought, exceptional and specialized conditions even to those of the staff and of the membership of the previous Commission who had been studying the problem for three years, to which the most exhaustive examination and consideration had to be given.

The complexity of the problem increased rather than diminished as the factors of economic law and necessity had to be applied with meticulous care to all its phases.

No other port in the world has ever presented problems of such magnitude and complexity, and so there were no precedents comparable with this problem in all its aspects.

The shore lines of the Port of New York are not less than 800 miles and that means that to merely coast along those shores in a 10-knot vessel for ten hours of daylight each day would take eight days, or the average time of a fast passenger steamer crossing the Atlantic.

To merely pass through these waters by the most direct routes and viewing the shores only from each side without retracing step requires the daylight hours of two whole days and that only gives time for a superficial view and not for study.

The Vast Problem to be Solved

With 105 municipalities, with 12 trunk line railroads bringing in and taking out of or through the Port over 75,000,000 tons of freight per annum, with an immense number of foreign and domestic steamships bringing into or taking out of the port over 45,000,000 tons per annum, with

an almost incalculable amount of local water-borne traffic within the port, with the most prodigious manufacturing output in the world within a similar area, with a variety of products and commodities to be handled unprecedented anywhere else, with 8,000,000 people within the district to be housed, clothed, fed, provided with the means of carrying on their business and deriving their livelihood, with, under present conditions, the collection and delivery of colossal amounts of freight and commodities from and to a few points of concentration that may be likened to decimal points, with the necessities of the agricultural and great manufacturing interests of the north, south, east and west to be considered,—indeed, with the business of the Nation as it flows in and out through this its chief gateway, **the whole problem might well be likened to a maze from which it is most difficult even for those with the most experience, with the most intensive study and with the application of the best judgment, to find the right way out.**

The first essential was a correct and complete analysis of existing conditions. That was given to us in the report of the previous Bi-State Commission.

It is indeed gratifying to be able to state that in the searching review of that analysis which has been made by the Port Authority in conjunction with the many expert organizations and persons having to do with the various elements of transportation, not a single fundamental fact set forth in that analysis has been found in error or disproved, and it has been generally endorsed as the only complete, thorough and accurate determination of fundamental conditions as they existed at the time of that study and that nothing like it had ever been accomplished before.

The process of reviewing that analysis with the many interests involved and reaching a consensus of approval in conclusion took several months of intensive work.

With that foundation established, the Port Authority then proceeded in conjunction with the various conferees and in many prolonged conferences, to similarly review and study the plans suggested for prompt relief and to promote the future development and growth of the business of the Port.

Principles Underlying Development

It had already become clear that certain underlying fundamental conditions precedent could alone provide a proper solution of the problem and that any physical plans must comply with and be governed by those principles.

Enumerated they are—

First—That terminal operations within the port district must be unified and under one administration;

Second—That there should be consolidation of shipments at proper classification points so as to eliminate duplication of effort, inefficient loading of equipment and realize reduction in expenses;

Third—That there must be the most direct routing of all commodities so as to avoid centers of congestion, conflicting currents and long truck-hauls;

Fourth—That all terminal stations should be Union stations;

Fifth—That the process of coordinating facilities should so far as practicable adapt existing facilities as integral parts of the new system so as to avoid needless destruction of existing capital investment and reduce so far as may be possible the requirements for new capital;

Sixth—That all railroads must be brought to all parts of the port and wherever practicable without cars breaking bulk, and that this necessitates tunnel connection between New Jersey and Long Island;

Seventh—That there must be urged upon the Federal Authorities improvement of channels so as to give access for that type of water-borne commerce adapted to the various forms of development which the respective shorefronts and adjacent lands of the port would best lend themselves to;

Eighth—Highways for motor truck traffic must be laid out so as to permit the most efficient inter-relation between terminals, pier and industrial establishments not equipped with railroad sidings and for the distribution and collection of building materials and many other commodities which must be handled by trucks.

When the notice for this meeting was sent out the Port Authority had reached a unanimous conclusion regarding all features of the plan to be recommended except as regards service to and from New Jersey and Manhattan Island, which was the most complex and difficult element in the problem and which required special treatment and consideration.

Within the last month or six weeks new and very large plans and projects relating to this particular phase were presented, to the Commission for its consideration. These entailed additional conferences, concentrated analysis, day and night study by the staff and the Commissioners.

Late though it was, when these great projects were presented, the Commission felt that it should not reach its own conclusions until it had assembled and exhaustively studied and considered every plan from whatsoever source it might appear, and until there had been applied to it the same measure of analysis and economic test that had been applied to the studies of the previous Bi-State Commission.

The map that is before you to-day therefore does not show upon it the proposals for Manhattan, but I am glad to be able to advise you that the Commission has within a few days also reached a unanimous conclusion as to that,

and is therefore able to-day to present the complete plan in the description to follow.

The question of proper belt lines to permit of the unification and consolidation of terminal operations is perhaps the keystone to the arch of the structure which we call a comprehensive plan for the future development of the Port. In creating such an arch if the keystone is not in the proper place the whole construction will be defective, and if the structure is not designed in the best way for the service it is to perform, manifestly the best results cannot be looked for.

Must Consider Whole Port

There are, therefore, two main factors to be considered, the purely physical factor and the service factor. There is still a third factor which must not be overlooked, and that is that we have to consider the interests of the whole Port as well as the relations of each part. There must be a physical connection between the west and the east sides of the Port. In crossing the boundary line between the two States it must be so located that the consent of New Jersey municipalities will be readily secured for the necessary rights of way and so that the assent of the State of New Jersey to the crossing may likewise be obtained, and this will be most readily obtainable through the adoption of the comprehensive plan. The keystone of the arch in the plan now presented to you is the middle belt line in New Jersey, identified by the number 10 on the map.

The chief reasons for this are:

(a) That in that location can be made the shortest connecting link between all of the railroads terminating on the west side of the Port;

(b) That it lies adjacent to and easterly of the existing break-up and classification yards of each of those railroads, with which it can be readily connected;

(c) That the cars from trains broken up and classified in those yards will then continue to move to this shortest connecting belt line by the shortest and most direct route and in the right direction;

(d) Conversely, that the same principle applies to west-bound movements.

This is a middle belt line extending from a connection with the Baltimore & Ohio Railroad north along the Central Railroad of New Jersey, crossing Newark Bay by the bridge of the Pennsylvania and Lehigh Valley Railroads, thence northward on the west side of Bergen Hills, generally east of the break-up yards of the New Jersey railroads, to a connection with the West Shore Railroad in the vicinity of Bellman's Yard, together with the Newark and Elizabeth Branch of the Central Railroad of New Jersey from Port Newark northward to Newark Transfer, thence eastward across the Newark and New York bridge of the Central

Railroad of New Jersey to a connection with the above route.

This keystone of the arch is marked in somewhat heavier lines than the others indicated. It is from this line that a connection is made to the essential tunnel from Greenville to Bay Ridge indicated by the number 11 on the map, by which means all of the railroads terminating on the west side of the Port shall be brought to the easterly side of the Port for direct delivery in standard cars without breaking bulk of all freight destined for Long Island, the Bronx and New England points. And it is by means of this same belt that at appropriate locations there can be established suitable facilities for the consolidation of the car float and lighterage movement that must continue.

The Belt Lines Suggested

The line indicated upon the map by the NUMBER 1 is a middle belt line on Long Island, following the general route of the New York Connecting Railroad and that portion of the Long Island Railroad which connects the New Haven system with Bay Ridge and with the TUNNEL No. 11 already referred to, thereby furnishing the direct through service in standard freight cars without breaking bulk to Long Island, Bronx and New England points, with spurs to waterfront belt lines on those portions of the Long Island shore front lying within the Port district.

NO. 2 is a marginal railroad extending from the New York Connecting Railroad eastward along the north shore of the East River to Throgg's Neck, together with a connection from it northward along the west side of Westchester Creek to the Westchester Yard of the New Haven Railroad.

NO. 3 is a marginal railroad extending from the New York Connecting Railroad in Astoria to Flushing Creek, together with an extension up Flushing Creek to a point above Strong's Causeway.

NO. 4 is a marginal railroad from the New York Conencting Railroad in Astoria extending down the shore of the East River to a connection with the Long Island Railroad to Hunter's Point.

NO. 5 is a marginal railroad extending from a connection with the Long Island Railroad through Bushwick, down the south side of Newtown Creek to the East River, and southward along the east side of the East River to Wallabout.

NO. 6 is a marginal railroad extending from Wallabout southward along the waterfront to Bay Ridge, covering the territory of the Jay Street Terminal, New York Docks, and Bush Terminal.

NO. 7 is a connection between the marginal railroad

between Astoria and Hunter's Point, shown on the map as No. 4, and the marginal railroad along Newtown Creek and the East River, shown on the map as No. 5, and also the connection between the marginal railroad from No. 5 and the marginal railroad running from Wallabout southerly to Bay Ridge, shown on the map as No. 6.

NO. 8 is a marginal railroad skirting Jamaica Bay on the northerly and westerly sides, connecting with the Long Island Railroad south of East New York, and extending on the east to a connection with the existing lines of the Long Island Railroad.

NO. 9 is a marginal railroad extending along the Jersey shore of the Hudson River from Fort Lee to Bayonne, being the consolidation of four existing waterfront lines.

NO. 12 is a belt line railroad on Staten Island connected with the Stapleton piers and extending westward along the route of the North Shore Line of the Baltimore & Ohio Railroad, across the Arthur Kill to a connection with the middle belt line at the junction of the Baltimore & Ohio Railroad and the Central Railroad of New Jersey. This belt line can be connected with the tunnel under the Narrows directed by existing legislation to be built by the City of New York.

NO. 13 is an outer belt line railroad extending from Piermont on the Hudson River to some point near Summit, and then extending southerly along a practical route approximately paralleling the westerly limits of the Port District to some point near New Brunswick, and also a branch from this line from a point near Summit easterly to a connection with the middle belt line west of Newark Bay.

NO. 14 is a marginal railroad extending from a point on the outer belt line railroad near New Brunswick down the Raritan River to Perth Amboy, thence northerly and approximately parallel to the Arthur Kill to a connection with the middle belt line near the Baltimore & Ohio Railroad.

NO. 15 is a marginal railroad on Staten Island along the easterly side of the Arthur Kill from the Baltimore & Ohio Railroad to Tottenville, and from Tottenville along the southwesterly shore of Staten Island to Stapleton, to a connection with belt line No. 12 near Stapleton.

NO. 16 is a marginal railroad extending from the Central Railroad of New Jersey west of the Passaic River in Newark, northerly through the Kearney and Hackensack Meadows to a point near Hackensack, and a branch crossing the Hackensack River and traversing the Secaucus Meadows northerly to a point near Ridgefield Park. The portion crossing the Pennsylvania Railroad and the D. L. & W. Railroad main line passenger lines to be built as and when justified. These lines to be connected with existing

railroads where feasible and to the middle belt line railroad.

NO. 17 is a marginal railroad along the easterly side of the Hackensack River and Newark Bay from the D. L. & W. Railroad down to Bayonne, with the necessary connections to the middle belt line.

NO. 18 is a belt line railroad extending from a connection with the New York Central at Spuyten Duyvil, running easterly and southerly generally along the Harlem River to a connection with the New York, New Haven & Hartford Railroad and with the New York Connecting Railroad and middle belt line No. 1.

NO. 19 is a marginal railroad extending from Perth Amboy southerly across the Raritan River, one branch extending southeastly along the Central Railroad of New Jersey to Atlantic Highlands, another branch extending southerly from South Amboy generally along the line of the Raritan River Railroad, to connect with the Pennsylvania Railroad south of New Brunswick.

It will be seen from this map and from these accompanying descriptions that the plan conforms to the fundamental principles previously enumerated, to permit of unification of railroad service, to bring all railroads to all parts of the Port (excepting only Manhattan Island), to promote industrial development, and to establish the most direct distribution of freight to its respective destinations and the most direct and economic intercommunication between rail and water-borne commerce.

Service to Manhattan

Manhattan service presented more involved problems and conditions peculiar to itself. It involved also questions of public policy affecting both New York and New Jersey, in relation to the respective waterfronts on the Hudson River. At present a large majority of the west water front of the Hudson River is occupied by terminal and float bridge yards of the New Jersey Railroads, and a large part of the easterly side by the pier stations to which their floating equipment is brought for discharging and loading east and west-bound freight.

Operations as at present conducted bring to Manhattan quantities of freight not intended for consumption or use on the Island of Manhattan, thereby involving unnecessary congestion and long truck hauls. Similarly, large quantities of freight not originating in Manhattan are at present trucked to the receiving stations on Manhattan, intensifying those conditions. It is very difficult to determine and no one can safely forecast exactly what effect the diversion by more direct means of communication as outlined on this plan will have upon the tonnages remaining to be handled to and

from Manhattan. The ideal solution would be to have only that which is necessary for consumption in or for shipment from Manhattan itself handled on the Island of Manhattan, and this ideal has been kept in view in a study of the general comprehensive plan. Manhattan must continue to be supplied with all those things necessary to the support of its people and the maintenance of its business and home life, and until other and better means than now exist are provided the waterfronts of the Hudson River on both shores unavoidably would be compelled to furnish space for the needed rail terminals.

To Free the Waterfront for Shipping

Public policy, however, as well as sound economics, prescribe that the waterfront should be free for its natural and more normal uses by shipping. Highly specialized industries and services are located there, such as the refrigerated perishable products including meat, fruits, vegetables, milk, dairy and egg products, and there are the strongest reasons why these products should reach the warehouses furnished with cold storage without breaking bulk from the refrigerator car. Custom in some cases for almost a hundred years has centralized certain of these industries at points of concentration to which the trades have become so accustomed they cannot immediately be altered, even to readjust themselves to a more economic situation, without disorganization and without destruction of much invested capital. Many more projects have been submitted to and examined by the Commission relating to the solution of the Manhattan problem than of all the rest of the Port combined. The Port Authority decided that any plan for Manhattan which did not free the Hudson River waterfront for shipping would be inconsistent with the best public policy and uneconomic. This section has been and will continue increasingly to be in demand as the berthing place of the fast passenger liners plying to all parts of the world and for such coastwise shipping as brings perishable food products for the markets of Manhattan. The available space is none too large to be allocated solely as time goes on for those specific purposes.

On the other hand, the opposite shore front on the New Jersey side which can be furnished with immediate rail head connection for standard freight cars without breaking bulk offers facilities for heavy cargo loadings direct from rail to ship, which is impracticable on the corresponding opposite shore front of Manhattan. Therefore, impelling reasons require that any method devised for the service of local Manhattan freight should free these waterfronts for those respective purposes.

New Tunnel Proposed

The Commissioners unanimously decided that the point

from Manhattan. The ideal solution would be to have only that which is necessary for consumption in or for shipment from Manhattan itself handled on the Island of Manhattan, and this ideal has been kept in view in a study of the general comprehensive plan. Manhattan must continue to be supplied with all those things necessary to the support of its people and the maintenance of its business and home life, and until other and better means than now exist are provided the waterfronts of the Hudson River on both shores unavoidably would be compelled to furnish space for the needed rail terminals.

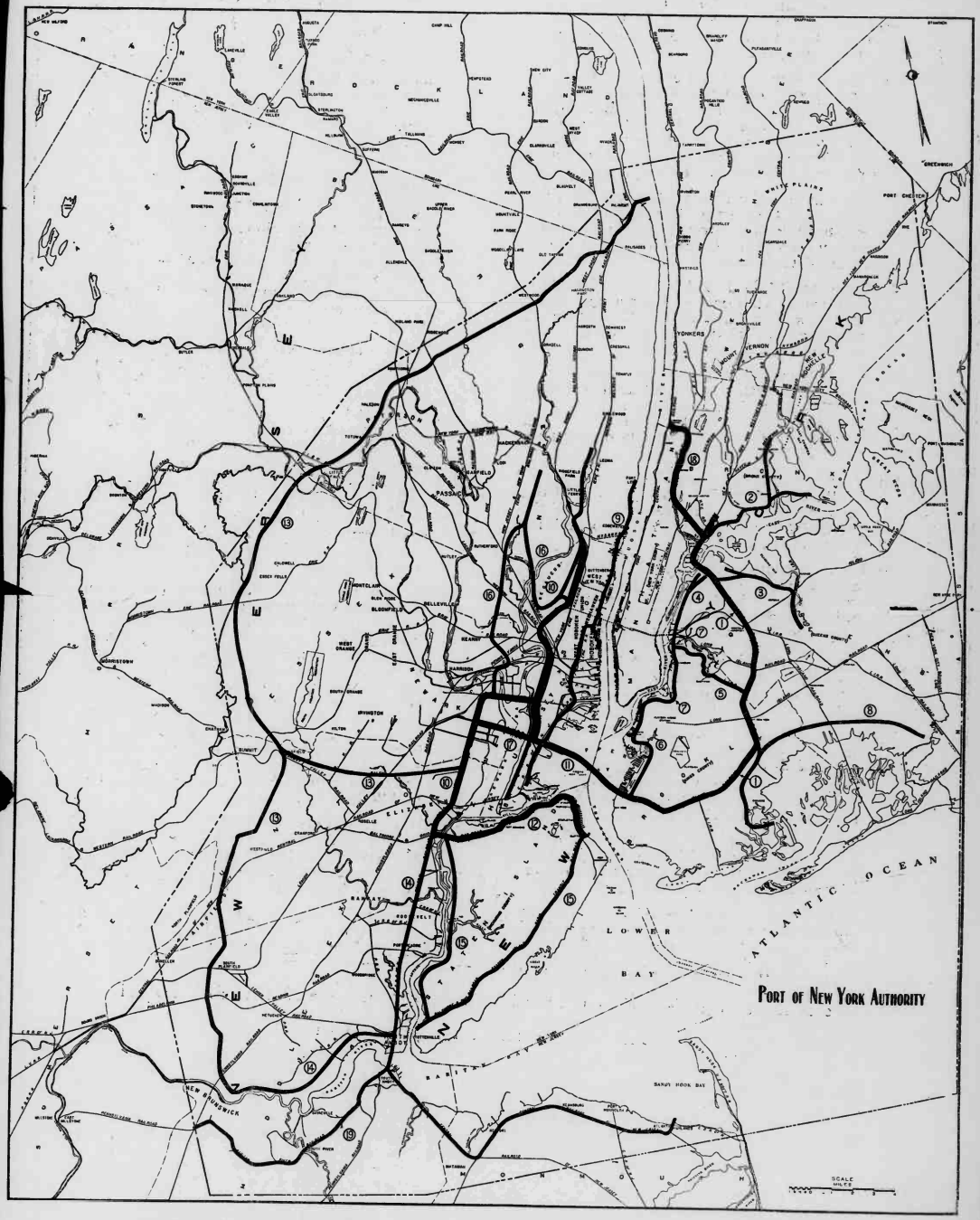
To Free the Waterfront for Shipping

Public policy, however, as well as sound economics, prescribe that the waterfront should be free for its natural and more normal uses by shipping. Highly specialized industries and services are located there, such as the refrigerated perishable products including meat, fruits, vegetables, milk, dairy and egg products, and there are the strongest reasons why these products should reach the warehouses furnished with cold storage without breaking bulk from the refrigerator car. Custom in some cases for almost a hundred years has centralized certain of these industries at points of concentration to which the trades have become so accustomed they cannot immediately be altered, even to readjust themselves to a more economic situation, without disorganization and without destruction of much invested capital. Many more projects have been submitted to and examined by the Commission relating to the solution of the Manhattan problem than of all the rest of the Port combined. The Port Authority decided that any plan for Manhattan which did not free the Hudson River waterfront for shipping would be inconsistent with the best public policy and uneconomic. This section has been and will continue increasingly to be in demand as the berthing place of the fast passenger liners plying to all parts of the world and for such coastwise shipping as brings perishable food products for the markets of Manhattan. The available space is none too large to be allocated solely as time goes on for those specific purposes.

On the other hand, the opposite shore front on the New Jersey side which can be furnished with immediate rail head connection for standard freight cars without breaking bulk offers facilities for heavy cargo loadings direct from rail to ship, which is impracticable on the corresponding opposite shore front of Manhattan. Therefore, impelling reasons require that any method devised for the service of local Manhattan freight should free these waterfronts for those respective purposes.

New Tunnel Proposed

The Commissioners unanimously decided that the point



Proposed Belt Lines for the Port of New York District in the Comprehensive Plan for the Development of the Port of New York

No. 1 is a middle belt line following the general route of the New York Connecting Railroad and that portion of the Long Island Railroad connecting the New Haven system with Bay Ridge.

No. 2 is a marginal railroad extending from the New York Connecting Railroad eastward along the north shore of the East River to Throggs Neck, together with a connection from it northward along the west side of Westchester Creek to the Westchester Yard of the New Haven Railroad.

No. 3 is a marginal railroad extending from the New York Connecting Railroad in Astoria, to Flushing Creek, together with an extension up Flushing Creek to a point above Strongs' Causeway.

No. 4 is a marginal railroad from the New York Connecting Railroad in Astoria, extending down the east bank of the East River to a connection with the Long Island Railroad at Hunter's Point.

No. 5 is a marginal railroad extending from a connection with the Long Island Railroad. through Bushwick, down the south side of Newtown Creek to the East River, and southward along the east side of the East River to Wallabout.

No. 6 is a marginal railroad extending from Wallabout southward along the waterfront to Bay Ridge, covering the territory of the Jay Street Terminal, New York Docks, Bush Terminal, etc., etc.

No. 7 is a connection between the marginal railroad between Astoria and Hunter's Point shown on the map as No. 4 and marginal railroad along Newtown Creek and the East River shown on the map as No. 5, and also the connection between the marginal railroad from No. 5 above referred to and the marginal railroad running from Wallabout southwardly to Bay Ridge, shown on the map as No. 6.

No. 8 is a marginal railroad skirting Jamaica Bay on the northerly and westerly sides, connecting with the Long Island Railroad south of East New York and extending on the east to a connection with the existing line of the Long Island Railroad.

No. 9 is a marginal railroad extending along the Jersey shore of the Hudson River from Fort Lee to Bayonne, being a consolidation of four existing waterfront lines.

No. 10 is a middle belt line extending from a connection with the Baltimore & Ohio Railroad north along the Central Railroad of New Jersey, crossing Newark Bay by the bridge of the Pennsylvania and Lehigh Railroads, thence northward on the west side of Bergen Hill generally east of the break-up yards of the Jersey railroads to a connection with the West Shore Railroad in the vicinity of Bellman's Yard, together with the Newark and Elizabeth Branch of the Central Railroad of New Jersey from Port Newark northward to Newark Transfer, thence eastward across the Newark and New York Branch of the Central Railroad of New Jersey to a connection with the above route.

No. 11 is a belt line tunnel between the middle belt lines of New Jersey and in Long Island, passing under the Upper Bay from Bay Ridge to a point near Greenville.

No. 12 is a belt line railroad on Staten Island connected with the Stapleton piers and extending westward along the route of the North Shore Line of the Baltimore & Ohio Railroad, across the Arthur Kill to a connection with the middle belt line at the junction of the Baltimore & Ohio Railroad and the Central Railroad of New Jersey. This belt line can be connected with the tunnel under the Narrows directed by existing legislation to be built by the City of New York.

No. 13 is an outer belt line railroad extending from Piermont on the Hudson River to some point near Summit, and thence extending southerly along a practical route approximately paralleling the westerly limits of the Port District to some point near New Brunswick, and also a branch from this line from a point near Summit easterly to a connection with the middle belt line west of Newark Bay.

No. 14 is a marginal railroad extending from a point on the outer belt line railroad near New Brunswick down the Raritan River to Perth Amboy, thence northerly and approximately parallel to the Arthur Kill to a connection with the middle belt line near the Baltimore & Ohio Railroad.

No. 15 is a marginal railroad on Staten Island along the easterly side of the Arthur Kill from the Baltimore & Ohio Railroad to Tottenville, and from Tottenville along the southwestly shore of Staten Island to Stapleton, to a connection with belt line No. 12, near Stapleton.

No. 16 is a marginal railroad extending from the Central Railroad of New Jersey west of the Passaic River in Newark, northerly through the Kearney and Hackensack Meadows to a point near Hackensack, and a branch crossing the Hackensack River and traversing the Secaucus Meadows northerly to a point near Ridgefield Park. The portion crossing the Pennsylvania Railroad and the D. L. & W. Railroad main line passenger lines to be built as and when justified. These lines to be connected with existing railroads where feasible and to the middle belt line railroad.

No. 17 is a marginal railroad along the easterly side of the Hackensack River and Newark Bay from the D. L. & W. Railroad down to Bayonne, with the necessary connections to the middle belt line.

No. 18 is a belt line railroad extending from a connection with the New York Central at Spuyten Duyvil, running easterly and southerly generally along the Harlem River to a connection with the New York, New Haven & Hartford Railroad and with the New York Connecting Railroad, and Middle belt line No. 1.

No. 19 is a marginal railroad extending from Perth Amboy southerly across the Raritan River, one branch extending southeasterly along the Central Railroad of New Jersey to Atlantic Highlands, another branch extending southwesterly from South Amboy generally along the line of the Raritan River Railroad, to connect with the Pennsylvania Railroad south of New Brunswick.

THE PORT OF NEW YORK
AUTHORITY.

of classification and dispatch of Manhattan freight from New Jersey should be west of the water front, and that necessarily means that its starting point should be west of the Bergen Hills. It has unanimously decided that the terminal stations on Manhattan Island should be inland from the water front for the purposes of freeing that for steamship business, with access to the piers unimpeded by rail traffic destined for consumption on Manhattan or by freight originating on Manhattan for rail shipment via the New Jersey roads.

The Commission has given the most exhaustive study to whether the transportation of freight between New Jersey and Manhattan should be on the water, above the water, or by tunnel under the water. This question had to be considered coincidentally with the method of distribution to be devised after it reached Manhattan, and has unanimously decided that the connection should be by tunnel. The Commission has found that the amount of space that would be required on Manhattan Island to handle the number of standard freight cars that would have to be brought daily to and taken from the Island to accommodate even the present tonnages, would require so much land for tracks, yards, switching facilities, and supporting warehouse terminals, that it is economically impracticable to provide for the needs of the future by any system that has been presented or that could be devised, which entailed the operation of an all standard car freight service for inbound and outbound freight on this island without breaking bulk. The problem of westbound loadings to destination, of room to make the necessary set-ups and load and dispatch cars within the necessary time, cannot be solved except at an expense which would put an excessive burden upon the commerce instead of reducing that now existing.

Favor Automatic Electric System

The Commission has therefore found that the automatic electric system suggested by the former Bi-State Commission, with some important modifications, furnishes the best solution to meet all the complexities which exist and have developed in the discussions which have been held, and which seems to be the only one so far that will stand the acid test of economic proof. While this is a novel system considered on so large a scale, it does not involve new or unsolved problems, either in construction or operation. Similar equipment and operations though on a smaller scale have been practically tested over a period of several years in England, and the Post Office Department as the result of those practical tests is now installing a high speed underground automatic electric system for the distribution of its mail. The system proposed here is on a much larger scale, but the principles have been established by experience and

its feasibility has been confirmed by the most expert advisers in all its features.

It is true, as previously stated, that the carrying out of the comprehensive plan for sending direct to other points freight intended for them will have an as yet undetermined effect upon the freight destined to Manhattan alone, and it is also true that the installation of a complete new system such as the automatic electric will require radical changes in some existing customs of trade and methods of railway operation. Some of these factors are indeterminable at the moment by any exact science. It is considered, therefore, that the execution of the plan must be a process of evolution rather than one of revolution. Such a system would take several years to design, build and equip. Immediate relief in some degree must be provided. This automatic electric system as designed by the Bi-State Commission is fully described in Chapter 14 of the Bi-State Commission's report. I will not attempt to repeat it here further than to say that it is designed for standard gauge tracks and for a cross section of tunnels and underground work of size, curvatures and grades to admit of standard freight cars being operated in it.

As approved by the Port Authority the terminals must be so constructed and the operations so arranged that those commodities requiring shipment in refrigerator cars can be brought without breaking bulk to the terminals in Manhattan. This has been determined to be feasible. The locations of the terminals suggested by the previous commission were made after an exhaustive study of the pick-ups and deliveries from existing pier stations and with the view of zoning the Island so as to equalize, so far as practicable, the pick-ups and deliveries within each zone, and thus to shorten truck hauls, eliminating converging and conflicting truck routes, and to lessen congestion upon the streets. But they were tentative, and the system permits of such flexibility that their exact locations can be altered if upon further study the diversion of freight destined to other parts of the port from Manhattan should make alterations in the locations of the Manhattan terminals desirable.

Immediate Relief

It would take several years to design, construct and install the complete system. In the meantime prompt relief can be provided by consolidation of car floats and lighterage service at appropriate points on the opposite side of the river, by improved unification of truck services and by the establishment on Manhattan of inland union terminals serving such consolidated and unified floating and truck operations, the inland terminals to be so designed and placed as to be the terminals of the automatic electric system when built and installed. Thus prompt relief can be obtained as

part of the evolutionary process of bringing about the ultimate completion of the whole, and this can be done without abruptly disorganizing the industries and services upon which the City necessarily depends and without the destruction of large invested capital.

The Strike Emergency

During the most intensive period of the work of the Port Authority and its staff in assimilating and considering all the testimony and ideas that had been presented from any source in the many conferences that had been held, the country was threatened with a total suspension of railway transportation. There was placed upon the Port Authority the responsibility for meeting this emergency with a plan and organization to provide for the supply of the necessaries of life of all of the people and communities lying within the port district. Clothed with the powers of two States by the governor of each, and therefore with the full cooperation of all the State Departments, having the cooperation and assistance of the Commissioner of Health of New York, with all the emergency powers at his command, with the assistance and cooperation of the Federal Departments through officers assigned by the General commanding the Department of the East, with headquarters at Governor's Island, and with the engineer officers having to do with rivers and harbors, stationed at this port, and with the assistance of the Regional representative of the Secretary of Commerce to whom the President had assigned the duty of lending Federal cooperation and coordinating the preparations of the States for this emergency, a complete organization and method of operation was devised which was presented to, met with the approval of and secured the heartiest cooperation from all of the elements engaged in the transportation and of the wholesalers and dealers engaged in the supply of the necessaries of life.

Office space was secured and fitted up with all the necessary paraphernalia for the use of the General Administrative Committee or General Staff, the necessary statistical information of the needs of the people and the available sources of supply was gathered, and in less than ten days all preparations had been completed so that, had the emergency developed on November 1st, there would have immediately functioned the direction and the facilities necessary to provide for the needs and comfort of the people.

The Work of the Port Authority

The Port Authority came into being on the 30th of April, 1921. The work that it was directed to do by the legislatures, viz, to present to them a comprehensive plan by January 1, 1922, seemed at first impracticable of accomplish-

ment within such a limited time. Immediately upon its organization the Port Authority appointed its staff and added thereto the Technical Advisory Board, of distinguished engineers, and after a full survey and discussion of the work before it determined that it could be accomplished within the time allotted if every member was willing to make the personal sacrifice and devote continuously the time necessary, and if they could prevail upon the many conferees to do the same.

The executives of the railroads and their technical and operating staffs were under the great pressure entailed by calls to attend meetings of the Senate Committee, the Interstate Commerce Commission and the Railroad Labor Board, and by the problems of readjusting themselves to the economies in their organizations made necessary by the conditions prevailing. Business men like yourselves were struggling with the conditions of industry and commerce brought about by the aftermath of the War. In spite of these many pressing matters, it gives me the greatest pleasure to be able to state that there was the finest spirit of self sacrifice, devotion and cooperation rendered to us by all of these various people and interests. The devotion and the intensive work done by the members of our staff without regard to time or effort or convenience, even without regard to conserving their health, can never be thoroughly understood or properly compensated. We have had the services of talent not on the basis of compensation comparable with that obtained in private enterprise, but given to us without stint, without counting the cost, as their contribution to a great public service.

Members of the Advisory Council, the plan is now before you for your consideration. I hope it may meet with your approval and adoption.

22303

END OF
TITLE